With this understanding, Motorola has grave concerns about the Comments by TIA concerning allocation of 28 GHz spectrum to fixed point-to-point microwave FS.

Specifically. TIA proposes an additional 300 MHz FS allocation to be shared with what it views as the LMDS backbone links of 28.2-28.35 GHz and 29.1-29.25 GHz.^{29/} The proposed rules, however, have never identified certain bands for LMDS backbones. Motorola has always assumed that the LMDS backbones would be operated on the same frequencies allocated to each LMDS operator. In particular, proposed rule § 21.108, which sets a single transmitter EIRP spectral density limit in the 29.1-29.5 GHz bands, was developed to protect MSS feeder uplinks in bands shared with LMDS hub transmitters and not to designate specific bands for LMDS backbones. The limits established in this rule were based on the assumption that there would be no more backbone transmitters than there are hubs. Thus, protection for MSS feeder links was needed only for the occasional near in-line coupling with low elevation satellite beams. Large numbers of FS transmitters feeding microcells, for example, would present additional concerns due to the aggregate uplink noise into an IRIDIUM® satellite with its spot beams hundreds of kilometers across. Until sharing studies are conducted to ensure that FS stations would not create excessive uplink interference, Motorola must object to allocating spectrum to FS in the 29.1 to 29.3 GHz band.

TIA further requests adding 500 MHz to FS in the 28.35-28.6 and 29.25-29.5 GHz bands. This proposal would require the IRIDIUM® System to share the 29.25-29.30 GHz band segment with FS and GSO FSS, while at the same time also sharing the corresponding downlink with GSO and FS. This proposal thus creates an

^{29/} Comments of TIA at 14-17.

<u>30/</u> <u>Id.</u>

overwhelming coordination problem. The Commission should accordingly refuse to permit FS to operate in this 50 MHz band segment as well.

G. The Commission Should Adhere To Its Decision Not To Use Auctions To License MSS Feeder Link Spectrum

One commenter, Hughes, urged the Commission to reconsider its decision not to employ auctions as a method of licensing MSS feeder link spectrum in the event the Commission made such a decision with respect to FSS GSO spectrum. The Commission should resist such a request, which is both contrary to sound policy and to prior Commission statements.

Hughes argues that it is premature for the Commission to decide whether to employ competitive bidding with respect to feeder link spectrum. In doing so it states:

Until the potential for mutual exclusivity between NGSO MSS and GSO FSS is resolved, the Commission's tentative conclusion that the MSS feeder links would not likely be subject to competitive bidding is premature. This determination was initially based upon the assumption that these "intermediate links" are readily susceptible to frequency coordination and are of little relative value. 31/2

This statement demonstrates that Hughes fundamentally misunderstands both § 309(j) and the Commission's implementation of it with respect to MSS feeder links. First, Hughes implies that the Commission cannot determine whether competitive bidding will be used absent a determination as to whether a mutually exclusive situation exists. This is quite simply not the case. While § 309(j) permits the Commission to employ competitive bidding only on the limited occasions where it is faced with mutually exclusive applications, it does not require the Commission to employ such a method

Comments of Hughes at 45 (<u>citing In re Implementation of Section 309(j) of the Communications Act -- Competitive Bidding</u>, 9 FCC Rcd. 2348, 2355-56 n. 30 (1994) ("<u>Competitive Bidding Report and Order</u>").

whenever it is faced with such applications. Rather the Commission is obligated to ensure that competitive bidding in any given situation will support the goals of § 309(j), which are, among other things, to promote the development and rapid deployment of new technologies, to promote economic opportunity and competition, and to ensure that new and innovative technologies are readily accessible to the American people. If competitive bidding will not advance such goals, the Commission should not employ it, even if mutually exclusive applications were to be filed. In short, the Commission is entitled to make a decision now that competitive bidding is an inappropriate means of licensing spectrum prior to determining whether mutually exclusive applications exist.

It should also be noted that § 309(j) (2) permits competitive bidding to be used only when "the principal use of such spectrum will involve, or is reasonably likely to involve, the licensee receiving compensation from subscribers in return for which the licensee--(i) enables those subscribers to receive communications signals that are transmitted utilizing frequencies on which the licensee is licensed to operate; or (ii) enables those subscribers to transmit directly communications signals utilizing frequencies on which the licensee is licensed to operate . . . " The key to this provision is the term "directly" As Congressman Dingell has pointed out in a communication to then Acting Chairman Commissioner Quello: "[t]he term was incorporated into the legislation in order to distinguish between those who subscribe to spectrum-based services and others whose use of the spectrum is incidental to some other service. In my view, the term "directly" in this instance in essence requires that subscribers operate a transmitter themselves. . . Inasmuch as [intermediate links] are incidental to

⁴⁷ U.S.C. § 309(j)(A)-(D).

the provision of a different, and not necessarily spectrum-based, service, subjecting these licenses to competitive bidding procedures would be inappropriate." 33/

The Commission itself has already made such a decision with respect to MSS feeder link spectrum. As the Commission correctly noted in the NPRM:

auctioning intermediate links could significantly delay the development and rapid deployment of new technologies, products and services for the benefit of the public, ... auctions for these links could impose significant administrative costs on licensees and the Commission, and ... it [is] unclear whether competitive bidding for intermediate links [will] recover for the public a significant portion of the value of the spectrum prevent unjust enrichment or promote efficient and intensive use of the spectrum.^{34/}

It was for all of these reasons that the Commission in implementing the competitive bidding provision of the Communications Act, concluded: "Therefore, intermediate links, including MSS feeder links...will not be subject to competitive bidding."

Motorola fully concurs with this reasoning, and urges the Commission to reconfirm its decision not to auction spectrum that, as the Commission itself recognizes, is so vitally important to NGSO MSS systems.

Letter from John D. Dingell, Chairman, House Committee on Energy and Commerce, to James H. Quello (Nov. 15, 1993). Under this clear interpretation, MSS feeder links should clearly not be subjected to competitive bidding.

^{34/} NPRM¶ 146.

²⁵⁵ Competitive Bidding Report and Order, 9 FCC Rcd. at 2356 (1994).

^{36/} NPRM ¶ 146.

III. LICENSING RULES FOR KA-BAND FSS SYSTEMS

A. Commenters Agree That The Commission Should Not Use Competitive Bidding For International Satellite Systems

1. A Decision To Employ Competitive Bidding Is Statutorily Premature

Commenters in this proceeding largely agreed that a Commission decision to use competitive bidding to license Ka-Band FSS systems would be statutorily premature. The Commission is authorized to use competitive bidding only if a mutual exclusivity situation exists. Moreover, as the Satellite Industry Association ("SIA") and others have pointed out, the Commission is under a statutory "obligation in the public interest to continue to use engineering solutions, negotiation, threshold qualifications, service regulations, and other means in order to avoid mutual exclusivity in application and licensing proceedings. As noted by Hughes, there is no reason why the Commission's current licensing procedures, which have to date successfully avoided mutual exclusivity in the FSS context, cannot continue to do so in the future.

The Commission has, in the past, successfully employed a flexible approach to satellite licensing tailored to the characteristics of that industry. As Hughes noted, the Commission has stated that

[T]he objective of our policies and procedures has been to accommodate as many applicants as is efficiently possible

See e.g., Comments of Telecommunications Industry Association ("TIA") at 5-6; Comments of Hughes at 31-32; Comments of Lockheed Martin at 5; Comments of Motorola at 21-22; Comments of Orion at 3-4; Comments of Panamsat at 3-5; and Comments of Loral at 5-6

lridium, Inc. is a member of SIA and fully supports and endorses its Comments.

^{39/} Comments of SIA at 5 (citing 47 U.S.C § 309(j)(6)(E) (1995)).

Comments of Hughes at 32.

with a minimum of administrative costs or delays. In particular, artificial or inflexible definitions of mutual exclusivity have been avoided and an increasing number of satellites have been authorized to satisfy growing demand. The result has been an industry that has served the public interest through the timely implementation of facilities and services. 41/

The Commission has achieved its "open entry" policies through, among other things, threshold qualification standards which enable it to weed out financially unsound or otherwise unqualified applicants. As Motorola noted in its Comments, these threshold standards, such as stringent financial and global coverage requirements, will go a long ways towards both ensuring that only the best qualified applicants are licensed and eliminating the potential for mutually exclusive applications.

2. A Decision To Employ Competitive Bidding Would Be Contrary To The Public Interest

The majority of commenters also agreed that auctioning satellite licenses would be contrary to the public interest, as it would be followed by a number of intolerable international ramifications. 43/ As NASA argued forcefully in its Comments:

Should the Commission decide to award these satellite licenses by auction, it would follow that virtually every other country in the world could be expected to follow suit. Satellite operators would be faced with the impossible situation of having to compete in multiple auctions, country by country, in order to provide their services and to achieve economic viability. They would be subject to insincere bids from those who could see an opportunity to make a fast buck by buying licenses for resale at a large profit.

We can think of nothing that has the international ramifications to the satellite industry that auctioning of

Comments of Hughes at 33 (citing GTE Satellite Corp., 93 FCC 2d 832, 840 (1983).

^{42/} Comments of Motorola at 22-24.

See e.g., Comments of NASA at 23-24; Comments of Hughes at 41-44; Comments of Motorola at 19-20; Comments of Orion at 4-5; Comments of Loral at 6-7; and Comments of Panamsat at 5-10.

licenses would have. We foresee it leading to the eventual downfall of a thriving industry where the United States currently has a commanding lead. 44/

A weakened U.S. industry, in turn, will be less able to respond to the needs of consumers or to actively participate in the development of the Global Information Infrastructure. Indeed, the Commission is itself well aware of these concerns. In its recent Public Notice announcing its decision to undertake a complete review of satellite licensing policies, it noted the unique policy issues that auctions present in the context of international satellite services. In this regard. International Bureau Chief Scott Harris has also taken note of the "penalty" nature of auctions for international satellite operators.

United States. As both Motorola and Hughes pointed out, multiple auctions abroad will make it virtually impossible for the U.S. industry to accurately assess the value of the spectrum auctioned at home, let alone to assess what its costs will be world-wide. In the words of Hughes:

With no previous market results and relatively little other information to provide guidance, it is difficult, if not impossible, to forecast the corresponding costs and uncertainty that will arise in acquiring critical spectrum rights for foreign markets. Therefore, the valuation process for U.S. spectrum will not likely be able to account fully for the new costs and uncertainty that may arise in a worldwide satellite auction scheme. 48/

Comments of NASA at 23.

Public Notice: <u>International Bureau To Review Satellite Licensing Policies</u>, Rep. No. IN 95-25 (Sept. 20, 1995).

<u>See FCC Begins "Top-to-Bottom Review" of Satellite Licensing Policies, Communications Daily at 1 (Sept. 21, 1995).</u>

Comments of Motorola at 20, Comments of Hughes at 43.

^{48/ &}lt;u>Id.</u>

The result will hardly be an efficient use of spectrum, which is, of course, one of the principle statutory objectives of § 309(j) itself 49/

IV. CONCLUSION

For the foregoing reasons, the Commission should adopt the rules proposed in the NPRM with the modifications and additions recommended herein.

Respectfully Submitted,

MOTOROLA, INC.

Michael D. Kennedy, Vice President and Director Regulatory Relations Barry Lambergman, Manager Satellite Regulatory Affairs Motorola, Inc. 1350 I Street, N.W. Washington, D.C. 20005 (202) 371-6900

Pantelis Michalopoulos Colleen Sechrest Steptoe & Johnson 1330 Connecticut Ave., N.W. Washington, D.C. 20036 (202) 429-3000

IRIDIUM, INC.

James G. Ennis, Director Francisco Patricia A. Mahoney, Senior Manager

Licensing Affairs

F. Thomas Tuttle, Deputy General Counsel

Iridium, Inc.

1401 H Street, N.W.

Washington, D.C. 20005

(202) 326-5795

^{§ 309(}j)(3)(D).

ENGINEERING CERTIFICATE

I hereby certify that I am the technically qualified person responsible for preparation of the engineering information contained in these Reply Comments, that I am familiar with Part 25 of the Commission's Rules, that I have either prepared or reviewed the engineering information submitted in these Reply Comments, and that it is complete and accurate to the best of my knowledge and belief.

NAME

Ken Engle

Motorola Satellite Communications

DATE: October 5, 1995

CERTIFICATE OF SERVICE

I, Colleen Sechrest, hereby certify that copies of the foregoing Reply Comments of Motorola Satellite Communications, Inc. and Iridium, Inc. filed in CC Docket 92-297 were served by hand delivery. this 10th day of October, 1995, on the following persons:

Chairman Reed Hundt Federal Communications Commission Rm. 814 1919 M Street, N.W. Washington, D.C. 20554

Commissioner James H. Quello Federal Communications Commission Rm. 802 1919 M Street, N.W. Washington, D.C. 20554

Commissioner Andrew C. Barrett Federal Communications Commission Rm. 826 1919 M Street, N.W. Washington, D.C. 10554

Commissioner Rachelle B. Chong Federal Communications Commission Rm. 844 1919 M Street, N.W. Washington, D.C. 20554

Commissioner Susan Ness Federal Communications Commission Room 832 1919 M Street, N.W. Washington, D.C. 20554

Scott Blake Harris Chief, International Bureau Federal Communications Commission Room 800, Stop Code 0800 2000 M Street, N.W. Washington, D.C. 20554 Thomas Tycz
Division Chief
Satellite and Radiocommunication Division
International Bureau
Federal Communications Commission
Room 6010
2025 M Street, N.W.
Washington, D.C. 20554

Donna Bethea
Satellite and Radiocommunication Division
International Bureau
Federal Communications Commission
1919 M Street, N.W.
Room 534
Washington, D.C. 20554

Harold Ng Chief, Engineering Branch Federal Communications Commission 2025 M Street, N.W. Room 6104 Washington, D.C. 20554

Regina Keeney Chief Wireless Telecommunications Bureau Federal Communications Commission 2025 M Street, N.W. Washington, D.C. 20554

Susan Magnotti
Private Wireless Division
Wireless Telecommunications Bureau
Federal Communications Commission
2025 M Street, N.W.
Room 6218
Washington, D.C. 20554

Robert James Common Carrier Bureau Federal Communications Commission 2025 M Street, N.W. Room 6310 Washington, D.C. 20554

Donald H. Gips
Deputy Chief
Office of Plans and Policy
Federal Communications Commission
1919 M Street, N.W.
Room 822
Washington, D.C. 20554

Gregory Rosston Office of Plans and Policy Federal Communications Commission 1919 M Street, N.W. Room 822 Washington, D.C. 20554

Ruth Milkman Senior Legal Advisor Chairman Reed E. Hundt 1919 M Street, N.W. Room 814 Washington, D.C. 20554

Rudolfo M. Baca Legal Advisor Commissioner James H. Quello 1919 M Street, N.W. Room 802 Washington, D.C. 20554

Brian Carter Special Advisor Commissioner Andrew C. Barrett 2025 M Street, N.W. Room 7218 Washington, D.C. 20554

Lisa B. Smith Legal Advisor Commissioner Andrew C. Barrett 1919 M Street, N.W. Room 826 Washington, D.C. 20554

Jill Luckett Special Advisor Commissioner Rachelle B. Chong 1919 M Street, N.W. Room 844 Washington, D.C. 20554

David A. Siddall Legal Advisor Commissioner Susan Ness 1919 M Street, N.W. Room 832 Washington, D.C. 20554

Colleen Sechrest